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// A23D 7/00****(21)Application number : 08-287280****(71)Applicant : NISSHIN OIL MILLS LTD:THE****(22)Date of filing : 11.10.1996****(72)Inventor : IKEDA NAOTAKA
SAITO YASUNOBU****(54) SEASONING FOR PANFRIED DISHES****(57)Abstract:**

PROBLEM TO BE SOLVED: To provide a seasoning for panfried dishes which contributes to the simplification of cooking of panfried dishes, i.e., allows cooking of the panfried dishes with only one step putting this seasoning together with food material into a wok or frying pan, etc., and mixing both while heating, reduces splashing of fat and oil and moisture at the time of cooking under heating and the scorching of the cooking material, the seasoning, etc., to the frying pan, etc., reduces oozing of moisture from the material and reduces the waterishness of the finished cooking.

SOLUTION: This seasoning for the panfried dishes is an O/W type emulsified compsn. contg. flavor components and consists of the emulsified compsn. which contains 10 to 50wt.% edible fats and oils, contains 0.03 to 0.3wt.% one or ≥ 2 kinds selected from glycerol fatty acid ester, org. monoglyceride, sorbitan fatty acid ester and enzyme decomposition lecithin respective having HLB of ≥ 7 and has a viscosity of 1000 to 7000 centipoises/20°C and an average oil drop particle diameter of $\leq 30\mu\text{m}$.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the suitable seasoning for stir-fried-dishes cooking. In more detail, the process of stir-fried-dishes cooking can be simplified, the workability at the time of cooking is improved, and it is involved in the seasoning which gives the stir-fried-dishes dish of good quality.

[0002]

[Description of the Prior Art] A stir-fried-dishes dish is one of the cooking recipes which are widely fond and are eaten all over the world, and there are also dramatically many opportunities cooked. Although fully heat a wok, a frying pan, etc. with a gas range etc., familiarize enough edible oil and fat (it may only be hereafter called fats and oils) with a wok or a frying pan, food raw materials various by high heat are stir-fried quickly, various kinds of seasonings are added and flavor is prepared quickly, there are no fixed criteria in actual cooking actuation and actual extent, it is complicated and common domestic stir-fried-dishes cooking takes a certain amount of skilled cooking technique. And when exudation of the problem that the raw material and seasoning which fats and oils and moisture fly and bound during cooking get burned, and the moisture from a raw material takes place, the raw material of the problem that a result of PASA **** one side and a dish becomes diluted occurring itself is also frequent.

[0003] Moreover, the seasoning for stir-fried dishes marketed from the former What mixed simply one sort or the seasoning beyond it used for flavoring of stir-fried dishes with water Are (calling it the seasoning of a drainage system hereafter), and a wok, a frying pan, etc. are fully heated with a gas range etc. familiarize fats and oils with a wok or a frying pan enough, and said seasoning for stir-fried dishes be involved just before termination while stir-frying a food raw material over high heat quickly, and stir-frying it in it -- it uses for ***** and aims at preparing flavor simple. However, with this kind of seasoning for stir-fried dishes, even if it was hard to call it what fully simplified the process of stir-fried-dishes cooking and used such a seasoning for stir-fried dishes, the result of PASA and a stir-fried-dishes dish had the trouble that the raw

material itself became diluted by exudation of the problem which fats and oils and moisture fly and is over of producing a burn of a food raw material and a seasoning, and the moisture from a raw material.

[0004] Thus, in the conventional stir-fried-dishes cooking, anyway, it consisted of two processes of the process in which a process stir-fries a food raw material using fats and oils, and the process which seasons with a seasoning, and the result of PASA **** one side and a stir-fried-dishes dish had the trouble that the raw material itself became diluted by the problem that the food raw material and seasoning which fats and oils and moisture moreover fly and bound get burned, and moisture exudation from a raw material.

[0005]

[Problem(s) to be Solved by the Invention] In view of this actual condition, it means developing the seasoning for stir-fried dishes which can simplify the process of stir-fried-dishes cooking further, and can wipe away said trouble in the workability at the time of stir-fried-dishes cooking, and the quality of a stir-fried-dishes dish by this invention. Namely, the object of this invention can finish stir-fried-dishes cooking at the process by which mixing putting into a wok or a frying pan and heating with a food raw material was only simplified. And it is in offering the seasoning for stir-fried dishes which can control that there are few jump splashes of fats and oils and moisture at the time of this cooking, and it has few burns of a food raw material and a seasoning, and has little exudation of the moisture from a raw material, and sufficient moisture for a raw material remains in it, and a result of a stir-fried-dishes dish becomes diluted.

[0006]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, this invention persons can simplify the process of stir-fried-dishes cooking. That is, if , it closes that stir-fried-dishes cooking is finished only at one process mixed while putting into a wok or a frying pan and heating with a food raw material. Furthermore, control of burns, such as a cooking raw material to the fats and oils in the case of ** heating, control of jump splashes of moisture, ** wok, or a frying pan, and a seasoning, And the gestalt and combination component of the seasoning for stir-fried dishes which can demonstrate function sufficient about control of PASA and the sloppiness of a result of cooking of ** raw material were examined.

[0007] Consequently, the knowledge that the seasoning for stir-fried dishes which consists of an O/W mold emulsification constituent which comes to contain the same flavor component was more desirable than the seasoning for stir-fried dishes of the conventional drainage system which comes to contain a flavor component was acquired. It found out that what contains fats and oils in the O/W mold emulsification constituent which furthermore comes to contain a flavor component, uses together one sort of polyglyceryl fatty acid ester or sucrose fatty acid ester or two sorts to these, comes to carry out the amount combination of specification, using one sort of

a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin or two sorts or more, and presents specific description was effective.

[0008] The place which this invention is completed based on this knowledge, and is made into the summary Are the O/W mold emulsification constituent which comes to contain a flavor component, and edible oil and fat (the following -- the same) is contained ten to 50% of the weight to this whole constituent. HLB respectively Seven or more glycerine fatty acid esters, an organic-acid monoglyceride, It comes to contain one sort chosen from zymolysis lecithin or a five or more HLB sorbitan fatty acid ester, or two sorts or more 0.03 in all to 0.3% of the weight. Viscosity is 1000 to 7000 centipoise / 20 degrees C, and it is in the seasoning for stir-fried dishes characterized by average oil droplet particle diameter consisting of said emulsification constituent which is a thing 30 micrometers or less. In addition, what HLB uses together one sort of the sucrose fatty acid ester of 11-19 or polyglyceryl fatty acid ester or two sorts with one sort chosen from said glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin in this invention or two sorts or more respectively, and is contained 0.03 in all to 0.3% of the weight is more desirable.

[0009] Moreover, it comes to contain one sort more preferably chosen from the group which said seasoning for stir-fried dishes becomes further from a carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellant gum, and starch, or two sorts or more. Said seasoning for stir-fried dishes comes to contain xanthan gum, and pectin or starch still more preferably.

[0010] In addition, the stir-fried dishes in this invention mean dishes similar to these, such as stir-fried dishes of Chinese food, such as a CHINJAO sirloin, HOIKOUROU, 8 ****, and fried rice, general meat, greenstuff, and fish and shellfishes, a saute, and roast meat.

[0011]

[Embodiment of the Invention] Hereafter, this invention is explained to a detail. The seasoning for stir-fried dishes of this invention is an O/W mold emulsification constituent which comes to contain a flavor component, and seven or more glycerine fatty acid esters, an organic-acid monoglyceride, zymolysis lecithin, or HLB contains at least one sort as which 10 - 50 % of the weight and HLB are respectively chosen from five or more sorbitan fatty acid esters in edible oil and fat, or two sorts or more 0.03 to 0.3% of the weight. In addition, it is desirable for HLB to use together one sort of the sucrose fatty acid ester of 11-19 or polyglyceryl fatty acid ester or two sorts to one sort chosen from said glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin in this invention or two sorts or more respectively, and to make them contain 0.03 in all to 0.3% of the weight.

[0012] The flavor component used for the seasoning for stir-fried dishes of this invention can give chemical condiment, such as basic

seasonings, such as bean paste, soy sauce, a salt, pepper, vinegar, alcohol, sugar, oyster sauce, red, spinach Chinese miso, catsup, a tomato paste, Worcestershire sauce, and nuoc mam, and monosodium glutamate, various extracts, spices, perfume, and other flavors, and such combination is [that what is necessary is just what is used for seasoning of the usual stir-fried dishes / what kind of] sufficient as it.

[0013] Moreover, if edible oil and fat is edible oil and fat used for the usual stir-fried dishes, it cannot interfere, and it can raise modified fat, such as soybean oil, oleum rapae, corn oil, cotton seed oil, sesame oil, olive oil, safflower oil, high OREIKKU safflower oil, sunflower oil, palm oil, peanut oil, butter, beef tallow, lard, chicken oil and these judgment fats and oils, hydrogenated fats and oils, and ester interchange fats and oils, margarine, shortening, etc. as an example. These fats and oils are independent, or they can be used as mixture of two or more sorts of arbitration rates. In addition, in this invention, liquefied vegetable fat and oil, such as salad oil and sesame oil, can be used as main fats and oils, and animal fat and oil, such as various flavor oils, and butter, lard, can be suitably blended with this if needed.

[0014] In the fats-and-oils whole quantity, the loadings of edible oil and fat are 10 - 50 % of the weight to the whole seasoning of this invention, and are 20 - 40 % of the weight more preferably. It becomes diluted while a result of cooking will become scarce at a feeling of oiliness suitable to a stir-fried-dishes dish, if fewer than 10 % of the weight. Conversely, a result of cooking becomes oily too much and is not desirable if [than 50 % of the weight] more.

[0015] Moreover, it makes it indispensable to blend with the seasoning of this invention one sort chosen from a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin, or two sorts or more. Edible [usual] is presented with each of these. the lecithin manufactured considering oil seeds and the yolks, such as an soybean and a rapeseed, as a raw material with zymolysis lecithin here -- phospholipase A1 Phospholipase A2 etc. -- the mono-acyl glycerol lysolecithin obtained by hydrolyzing with an enzyme is said. HLB is a glycerine fatty acid ester, an organic-acid monoglyceride is seven or more respectively, and a sorbitan fatty acid ester is [five or more / at 14 or more and an organic-acid monoglyceride / in 9 or more and a sorbitan fatty acid ester] 12 or more in a glycerine fatty acid ester more preferably in 7 or more and zymolysis lecithin. Although especially the upper limit of HLB is not specified, it is the 20th place about. An addition is 0.03 - 0.3 % of the weight to the whole seasoning of this invention, and is 0.05 - 0.25 % of the weight more preferably. if there are few additions than 0.03 % of the weight -- the mean particle diameter of the oil droplet particle in an emulsification constituent -- being large (excess of 30 micrometer) -- an emulsification system becomes instability. If [than 0.3 % of the weight] more, while a burn of the food raw material to a frying pan or a pan, a seasoning, etc. will increase,

the inclination used as the stir-fried-dishes dish which is not desirable in flavor becomes large. It needs more additions than 0.3 % of the weight and is not desirable if HLB is smaller than 7.

[0016] In addition, the thing with which one sort of a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin or two sorts or more, and edible [usual] are presented and which HLB made contain one sort of the sucrose fatty acid ester of 11-19 or polyglyceryl fatty acid ester or two sorts 0.03 in all to 0.3% of the weight respectively at this invention is more desirable. Moreover, one sort of one sort or two sorts or more and sucrose fatty acid ester which are chosen from said glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin, or polyglyceryl fatty acid ester, or two sorts of concomitant use rates are still more desirable if one sort of a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin or two sorts or more are 30 % of the weight or more to these both total quantity. As said surfactant, as a glycerine fatty acid ester, for example Glycerol monostearate, As an organic-acid monoglyceride, glycerol distearate, glycerol monooleate, glycerol dioleate, a glycerol MONORINO rate, etc. A citric-acid monoglyceride, a diacetyl tartaric-acid monoglyceride, a succinic-acid monoglyceride, Although sorbitan monostearate, sorbitan monooleate, sorbitan distearate, sorbitan sesquioleate, etc. are raised as sorbitan fatty acid esters, such as an acetic-acid monoglyceride and a lactic-acid monoglyceride, it is not limited to these.

[0017] In short, the seasoning for stir-fried dishes of this invention contains a flavor component, water, and 10 - 50% of the weight of fats and oils for the above. HLB respectively Seven or more glycerine fatty acid esters, an organic-acid monoglyceride, 0.03 - 0.3 % of the weight is used for one sort as which zymolysis lecithin or HLB is chosen from five or more sorbitan fatty acid esters, or two sorts or more. An O/W mold emulsification constituent and nothing, Stir-fried-dishes cooking only by one process heated and mixed with a wok or a frying pan with a food raw material is attained by using this.

[0018] Furthermore, as an O/W mold emulsification constituent, the mean particle diameter of an oil droplet is 30 micrometers or less, and the seasoning for stir-fried dishes of this invention is 20 micrometers or less more preferably. In an excess of 30 micrometer, jump splashes of fats and oils and moisture increase in the case of cooking, and it is not desirable.

[0019] Moreover, the viscosity of the seasoning of this invention is 1000 to 7000 centipoise in 20 degrees C, is 2000 to 6000 centipoise more preferably, and is 3000 to 6000 centipoise still more preferably. By less than 1000 centipoises, jump splashes of fats and oils and moisture increase in the case of cooking, and user-friendliness becomes [a fluidity] few bad as a seasoning by excess of 7000 centipoises. Although viscosity is the O/W mold emulsification constituent of the range of 1000 to 7000 centipoise .

therefore, it becomes possible to wrap a food raw material in this emulsification coat good, and exudation of the moisture from a food raw material can be controlled, and a result of cooking does not become diluted.

[0020] In addition, in order to set the viscosity of an emulsification constituent as said within the limits, one sort chosen from the group which consists of a carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellant gum, and starch (corn starch, potatostarch, modified starch, etc.), or two sorts or more can be made to contain in this invention. Xanthan gum, tamarind seed gum, or locust bean gum is desirable among these gums or the thickening matter, and the concomitant use with xanthan gum and pectin or concomitant use with xanthan gum and starch is especially effective. Moreover, although it suits with other combination components, it comes out and the addition of these gums or the thickening matter cannot generally specify ***** easily, it is good at 0 - 10 % of the weight in general.

[0021] In order to manufacture the seasoning of this invention, emulsification can use a well-known approach. namely, an aqueosity component -- mixing -- or -- dissolving -- the aqueous phase -- carrying out -- moreover, an oily component -- mixing -- or -- dissolving -- an oil phase, nothing, a blender, a homogenizer, a homomixer, etc. -- using -- the need -- responding -- warming -- what is necessary is to mix the aqueous phase and an oil phase downward, and just to make an O/W mold emulsify In order to obtain the specific thing of the above [viscosity and average oil droplet particle diameter] especially, a homomixer is used for the aqueous phase and an oil phase, and it is 2000rpm. It is good to process more than the above and for 10 minutes, and to emulsify.

[0022] Moreover, in cooking stir-fried dishes, the operation of the seasoning of this invention is good only at the actuation mixed while paying the seasoning of this invention with this raw material in advance of the food raw material cut suitably and heating it like the time of the conventional stir-fried-dishes cooking to cookware, such as a wok and a frying pan.

[0023]

[Example]

The seasoning for the stir-fried-dishes seasoning of the one to examples 1-9 and example of comparison 5 invention in this application and a comparison was prepared according to the formula and emulsification conditions which were shown in a table 1, a table 2, and a table 3. In addition, emulsification of a seasoning was performed using TK homomixer (product made from special opportunity-ized Industry). Moreover, the seasoning of the example 1 of a comparison is not equivalent to the stir-fried-dishes seasoning of the drainage system which comes to contain the flavor component stated by the term of a Prior art, and preparation did not perform emulsification only by mixing of a raw material.

[0024] The value which measured the viscosity of the prepared

seasoning and average oil droplet particle diameter was shown in a table 1, a table 2, and a table 3. In addition, viscosity uses BM mold viscometer and is rotor No.3 and 12rpm. The value of 5 revolution eye was measured on conditions, and it observed and asked for oil droplet particle diameter using the microscope.

[0025]

[A table 1]

	実施例 1	実施例 2	実施例 3	実施例 4	実施例 5
水	15.65	35.85	25.50	22.55	22.60
砂糖	12.00	15.00	15.00	15.00	15.00
味噌	18.00	30.00	20.00	18.00	18.00
醤油	5.00	5.00	5.00	5.00	5.00
豆板醤	2.00	2.00	2.00	2.00	2.00
配 合	2.00	2.00	2.00	2.00	2.00
大豆サラダ油	—	—	30.00	—	—
成 菜種サラダ油	45.00	10.00	—	35.00	35.00
分 グリセリン脂肪酸エステル※1	0.15	—	—	—	0.05
人 有機酸モノグリセリド※2	—	0.10	—	—	0.15
量 ソルビタン脂肪酸エステル※3	—	—	0.10	—	—
量 酵素分解レシチン※4	—	—	—	0.25	—
% ホリグリセリン脂肪酸エステル※5	0.05	—	—	—	—
V ショ糖脂肪酸エステル※6	—	0.05	—	—	—
キサンタンガム	0.15	—	0.30	0.20	0.20
タマリンドシードガム	—	—	—	—	—
ペクチン	—	—	0.10	—	—
澱粉類※7	—	—	—	—	—
計	100.00	100.00	100.00	100.00	100.00
乳 回転数(rpm)	4,000	10,000	10,000	10,000	10,000
化 攪拌時間(分)	30	30	30	30	30
条 温度	常温	60℃	常温	常温	常温
件					
粘度(センチポイズ/20℃)	6,000	1,000	5,000	3,500	5,500
平均油滴粒子径(μm)	10	12	20	30	13

[0026]

[A table 2]

	実施例 6	実施例 7	実施例 8	実施例 9
水	22.60	20.40	22.60	21.80
砂糖	15.00	15.00	15.00	15.00
味噌	18.00	18.00	18.00	18.00
醤油	5.00	5.00	5.00	5.00
豆板醤	2.00	2.00	2.00	2.00
配ゴマ油	2.00	2.00	2.00	2.00
合大豆サラダ油	—	—	—	—
成菜種サラダ油	35.00	35.00	35.00	35.00
分グリセリン脂肪酸エステル※1	—	—	0.20	—
入有機酸モノグリセリド※2	—	—	—	—
重リルピタン脂肪酸エステル※3	—	0.10	—	0.10
量酵素分解レシチン※4	0.10	—	—	—
%モノグリセリン脂肪酸エステル※5	0.05	—	—	—
√ショ糖脂肪酸エステル※6	0.05	—	—	—
キサンタンガム	0.20	—	0.10	0.10
タマリンドシードガム	—	—	0.10	—
ペクチン	—	—	—	—
澱粉類※7	—	2.50	—	1.00
計	100.00	100.00	100.00	100.00
乳回転数(rpm)	10,000	10,000	10,000	10,000
化攪拌時間(分)	30	30	30	30
条温度	常温	常温	常温	常温
件				
粘度(センチポイズ/20℃)	5,000	6,000	4,000	6,000
平均油滴粒子径(μm)	17	22	21	14

[0027]

[A table 3]

	比較例 1	比較例 2	比較例 3	比較例 4	比較例 5
水	56.00	22.75	10.70	22.68	22.78
砂糖	15.00	15.00	12.00	15.00	15.00
味噌	20.00	18.00	10.00	18.00	18.00
醤油	5.00	5.00	5.00	5.00	5.00
豆板醤	2.00	2.00	2.00	2.00	2.00
配ゴマ油	2.00	2.00	—	2.00	2.00
合大豆サラダ油	—	—	—	—	—
成菜種サラダ油	—	35.00	60.00	35.00	35.00
分グリセリン脂肪酸エステル※1	—	0.10	—	—	0.02
ハ有機酸モノグリセリド※2	—	—	—	—	—
重ソルビタン脂肪酸エステル※3	—	—	0.10	0.30	—
量酵素分解レシチン※4	—	—	—	—	—
%ホリグリセリン脂肪酸エステル※5	—	—	—	—	—
Vシロ糖脂肪酸エステル※6	—	—	—	—	—
キサンタンガム	—	0.15	0.20	0.02	0.20
タマリンドガム	—	—	—	—	—
ペクチン	—	—	—	—	—
澱粉類※7	—	—	—	—	—
計	100.00	100.00	100.00	100.00	100.00
乳回転数(rpm)	1,000	2,000	10,000	10,000	10,000
化攪拌時間(分)	2	5	30	30	30
条件温度	常温	常温	常温	常温	常温
粘度(センチポイズ/20℃)	1,000	2,000	7,000	900	2,000
平均油滴粒子径(μm)	—	60	20	18	30

[0028] notes 1) Fly software A10 (HLB:14.5) by TAIYO KAGAKU CO., LTD.

notes 2) SunSoft No[by TAIYO KAGAKU CO., LTD.].641D (HLB:9.0)

notes 3) the Kao Corp. make -- Emasol L-10F (HLB:8.6)

notes 4) SANRESHICHINA by TAIYO KAGAKU CO., LTD. (HLB:12.0)

notes 5) the TAIYO KAGAKU CO., LTD. make -- SunSoft Q14S (HLB:14.5)

notes 6) DK ester F140 (HLB:13.0) by Dai-Ichi Kogyo Seiyaku Co., Ltd.

notes 7) Matsutani Chemical Industry Co., Ltd. pineapple ace 1 [0029]
Using the seasoning obtained in examples 1-9 and the examples 1-5 of a comparison, stir-fried dishes were cooked as follows and exudation of the moisture from a raw material, and an ease and a result of cooking were evaluated after cooking in the case of cooking.

(Cooking method)

b) When the seasoning of examples 1-9 and the examples 2-5 of a comparison is used : pay 22.5g of stir-fried-dishes seasonings to one frying pan.

2) put 30g of pork which carried out mincement into a frying pan, and a seasoning be involved -- stir-fry until it puts in cube cut cabbage 70g and fire passes on a cabbage, when eye ***** and fire pass.

b) When the seasoning of the example 1 of a comparison is used : heat one frying pan, put in 7.5g of soybean salad oil, and make it get used to a frying pan.

2) Put in and stir-fry 30g of pork which carried out mincement to the frying pan, and when fire passes, until just before it puts in cube cut cabbage 70g and fire passes on a cabbage, stir-fry.

3) pay 15g of seasonings and be involved in pork and a cabbage -- ** -- make it like and mix.

[0030] Assessment of exudation of the moisture from the aforementioned raw material was performed by the following approaches by making weight of sejunction water and evaporation water into an index in the seasoning of an example 1 and the example 1 of a comparison. This result is shown in a table 4.

Sejunction water: Fractionation of the stir-fried dishes after cooking was carried out to the solid section and the liquid section using the filter paper, and weight was measured by making the liquid section into sejunction water.

Evaporation water: The weight (sum total of the above-mentioned solid section and the liquid section) of the stir-fried dishes after cooking was measured, and difference with the sum total of the weight of the raw material before cooking and the weight of a seasoning was used as evaporation water. From a table 4, when the stir-fried-dishes seasoning of this invention was used, it was checked that the moisture of a raw material is well held in a raw material.

[0031]

[A table 4]

	実施例1 の調味料	比較例1 の調味料
分離水 (g)	22.6	41.4
蒸発水 (g)	35.3	39.4

[0032] Moreover, assessment of an ease and a result of cooking was performed on the following score criteria by ten special panels in the seasoning of all examples and examples of a comparison about four items of the fats and oils under simplification of a cooking process, and cooking and jump splashes of moisture, the raw material to a frying pan, the bad debt of a seasoning, and the sloppiness of a result of cooking. The assessment result was shown in a table 5 in the average mark of ten special panels.

Simplification of a cooking process: It is simplified dramatically. Five points are simplified a little. Four points can be called neither. Three points are seldom simplified. Two points are not

simplified at all. In the fats and oils under one-point cooking, and the jump splashes emergency of moisture [little] [a little little / five points] Four points can be called neither. With a little many three points With very many two points It is few in the raw material to an one-point frying pan, and the bad debt emergency of a seasoning. [a little little / five points] Four points can be called neither. Many [in 2 point emergency with a little many three points] In the sloppiness of a result of an one-point dish, [very little] [a little little / five points] Four points can be called neither. There are a little many three points. With very many two points From the one-point table 5, if the stir-fried-dishes seasoning of this invention is used, stir-fried dishes can be cooked at the cooking process simplified extremely. And there were few jump splashes of fats and oils and moisture during cooking, and there were little raw material to a frying pan and bad debt of a seasoning, and it was checked that a result of stir-fried dishes does not become diluted. In addition, when the seasoning of the example 3 of a comparison was used, the result of cooking became oily too much and was not desirable.

[0033]

[A table 5]

調味料の種類	調理工程の簡略化	調理中の油脂および水分の飛び跳ね	フライパンへの素材、調味料の焦げ付き	料理の仕上がりの水っぽさ
実施例1	5. 0	4. 5	4. 8	4. 9
実施例2	5. 0	4. 3	4. 9	4. 8
実施例3	5. 0	4. 7	4. 8	4. 8
実施例4	5. 0	4. 3	4. 8	4. 8
実施例5	5. 0	4. 5	4. 8	4. 8
実施例6	5. 0	4. 6	4. 8	4. 9
実施例7	5. 0	4. 6	4. 7	4. 8
実施例8	5. 0	4. 5	4. 8	4. 8
実施例9	5. 0	4. 7	4. 8	4. 9
比較例1	3. 5	1. 5	2. 1	1. 2
比較例2	4. 5	2. 0	4. 0	4. 0
比較例3	4. 0	3. 2	4. 5	4. 9
比較例4	3. 5	2. 0	3. 1	3. 1
比較例5	3. 5	3. 0	2. 0	3. 5

[0034]

[Effect of the Invention] If the seasoning for stir-fried dishes of this invention is used, the process of stir-fried-dishes cooking can be simplified extremely. That is, stir-fried-dishes cooking can be performed only at one process mixed while putting into a wok or a

frying pan and heating with a food raw material. And there are few fats and oils in the case of cooking and jump splashes of moisture, moisture for a raw material with a burn of the cooking raw material to a wok or a frying pan, a seasoning, etc. it is few, and there is little exudation of the moisture from a raw material, and sufficient remains, and sloppiness of a result [a stir-fried-dishes dish] decreases.

[Translation done.]

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PRIOR ART

[Description of the Prior Art] A stir-fried-dishes dish is one of the cooking recipes which are widely fond and are eaten all over the world, and there are also dramatically many opportunities cooked. Although fully heat a wok, a frying pan, etc. with a gas range etc., familiarize enough edible oil and fat (it may only be hereafter called fats and oils) with a wok or a frying pan, food raw materials various by high heat are stir-fried quickly, various kinds of seasonings are added and flavor is prepared quickly, there are no fixed criteria in actual cooking actuation and actual extent, it is complicated and common domestic stir-fried-dishes cooking takes a certain amount of skilled cooking technique. And when exudation of the problem that the raw material and seasoning which fats and oils and moisture fly and bound during cooking get burned, and the moisture from a raw material takes place, the raw material of the problem that a result of PASA **** one side and a dish becomes diluted occurring itself is also frequent.

[0003] Moreover, the seasoning for stir-fried dishes marketed from the former What mixed simply one sort or the seasoning beyond it used for flavoring of stir-fried dishes with water Are (calling it the seasoning of a drainage system hereafter), and a wok, a frying pan, etc. are fully heated with a gas range etc. familiarize fats and oils with a wok or a frying pan enough, and said seasoning for stir-fried dishes be involved just before termination while stir-frying a food raw material over high heat quickly, and stir-frying it in it -- it uses for ***** and aims at preparing flavor simple. However, with this kind of seasoning for stir-fried dishes, even if it was hard to call it what fully simplified the process of stir-fried-dishes cooking and used such a seasoning for stir-fried dishes, the result of PASA and a stir-fried-dishes dish had the trouble that the raw material itself became diluted by exudation of the problem which fats and oils and moisture fly and is over of producing a burn of a food raw material and a seasoning, and the moisture from a raw material.

[0004] Thus, in the conventional stir-fried-dishes cooking, anyway, it consisted of two processes of the process in which a process stir-fries a food raw material using fats and oils, and the process which seasons with a seasoning, and the result of PASA **** one side and a stir-fried-dishes dish had the trouble that the raw material itself

became diluted by the problem that the food raw material and seasoning which fats and oils and moisture moreover fly and bound get burned, and moisture exudation from a raw material.

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CLAIMS

[Claim(s)]

[Claim 1] The seasoning for stir-fried dishes with which it is the O/W mold emulsification constituent which comes to contain a flavor component, edible oil and fat is contained ten to 50% of the weight, and HLB is respectively characterized by coming to contain one sort as which seven or more glycerine fatty acid esters an organic-acid monoglyceride, zymolysis lecithin, or HLB be chosen from five or more sorbitan fatty acid esters, or two sorts or more 0.03 to 0.3% of the weight, and consisting of said emulsification constituent whose viscosity is 1000 to 7000 centipoise / 20 degrees C, and whose average oil droplet particle diameter is a thing 30 micrometers or less.

[Claim 2] The seasoning for stir-fried dishes according to claim 1 which HLB uses together one sort of the polyglyceryl fatty acid ester of 11-19, or sucrose fatty acid ester, or two sorts with one sort as which seven or more glycerine fatty acid esters, an organic-acid monoglyceride, zymolysis lecithin, or HLB is respectively chosen for HLB from five or more sorbitan fatty acid esters, or two sorts or more respectively, and it comes to contain 0.03 in all to 0.3% of the weight.

[Claim 3] The seasoning for stir-fried dishes according to claim 1 or 2 which comes to contain one sort chosen from the group which consists of a carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellant gum, and starch, or two sorts or more.

[Claim 4] The seasoning for stir-fried dishes according to claim 1 or 2 which comes to contain xanthan gum, and pectin or starch.

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EFFECT OF THE INVENTION

[Effect of the Invention] If the seasoning for stir-fried dishes of this invention is used, the process of stir-fried-dishes cooking can be simplified extremely. That is, stir-fried-dishes cooking can be performed only at one process mixed while putting into a wok or a frying pan and heating with a food raw material. And there are few fats and oils in the case of cooking and jump splashes of moisture, moisture for a raw material with a burn of the cooking raw material to a wok or a frying pan, a seasoning, etc. it is few, and there is little exudation of the moisture from a raw material, and sufficient remains, and sloppiness of a result [a stir-fried-dishes dish] decreases.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] In view of this actual condition, it means developing the seasoning for stir-fried dishes which can simplify the process of stir-fried-dishes cooking further, and can wipe away said trouble in the workability at the time of stir-fried-dishes cooking, and the quality of a stir-fried-dishes dish by this invention. Namely, the object of this invention can finish stir-fried-dishes cooking at the process by which mixing putting into a wok or a frying pan and heating with a food raw material was only simplified. And it is in offering the seasoning for stir-fried dishes which can control that there are few jump splashes of fats and oils and moisture at the time of this cooking, and it has few burns of a food raw material and a seasoning, and has little exudation of the moisture from a raw material, and sufficient moisture for a raw material remains in it, and a result of a stir-fried-dishes dish becomes diluted.

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MEANS

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, this invention persons can simplify the process of stir-fried-dishes cooking. That is, if , it closes that stir-fried-dishes cooking is finished only at one process mixed while putting into a wok or a frying pan and heating with a food raw material. Furthermore, control of burns, such as a cooking raw material to the fats and oils in the case of ** heating, control of jump splashes of moisture, ** wok, or a frying pan, and a seasoning, And the gestalt and combination component of the seasoning for stir-fried dishes which can demonstrate function sufficient about control of PASA and the sloppiness of a result of cooking of ** raw material were examined.

[0007] Consequently, the knowledge that the seasoning for stir-fried dishes which consists of an O/W mold emulsification constituent which comes to contain the same flavor component was more desirable than the seasoning for stir-fried dishes of the conventional drainage system which comes to contain a flavor component was acquired. It found out that what contains fats and oils in the O/W mold emulsification constituent which furthermore comes to contain a flavor component, uses together one sort of polyglyceryl fatty acid ester or sucrose fatty acid ester or two sorts to these, comes to carry out the amount combination of specification, using one sort of a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin or two sorts or more, and presents specific description was effective.

[0008] The place which this invention is completed based on this knowledge, and is made into the summary Are the O/W mold emulsification constituent which comes to contain a flavor component, and edible oil and fat (the following -- the same) is contained ten to 50% of the weight to this whole constituent. HLB respectively Seven or more glycerine fatty acid esters, an organic-acid monoglyceride, It comes to contain one sort chosen from zymolysis lecithin or a five or more HLB sorbitan fatty acid ester, or two sorts or more 0.03 in all to 0.3% of the weight. Viscosity is 1000 to 7000 centipoise / 20 degrees C, and it is in the seasoning for stir-fried dishes characterized by average oil droplet particle diameter consisting of said emulsification constituent which is a thing 30

micrometers or less. In addition, what HLB uses together one sort of the sucrose fatty acid ester of 11-19 or polyglyceryl fatty acid ester or two sorts with one sort chosen from said glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin in this invention or two sorts or more respectively, and is contained 0.03 in all to 0.3% of the weight is more desirable.

[0009] Moreover, it comes to contain one sort more preferably chosen from the group which said seasoning for stir-fried dishes becomes, further from a carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellant gum, and starch, or two sorts or more. Said seasoning for stir-fried dishes comes to contain xanthan gum, and pectin or starch still more preferably.

[0010] In addition, the stir-fried dishes in this invention mean dishes similar to these, such as stir-fried dishes of Chinese food, such as a CHINJAO sirloin, HOIKOUROU, 8 ****, and fried rice, general meat, greenstuff, and fish and shellfishes, a saute, and roast meat.

[0011]

[Embodiment of the Invention] Hereafter, this invention is explained to a detail. The seasoning for stir-fried dishes of this invention is an O/W mold emulsification constituent which comes to contain a flavor component, and seven or more glycerine fatty acid esters, an organic-acid monoglyceride, zymolysis lecithin, or HLB contains at least one sort as which 10 - 50 % of the weight and HLB are respectively chosen from five or more sorbitan fatty acid esters in edible oil and fat, or two sorts or more 0.03 to 0.3% of the weight. In addition, it is desirable for HLB to use together one sort of the sucrose fatty acid ester of 11-19 or polyglyceryl fatty acid ester or two sorts to one sort chosen from said glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin in this invention or two sorts or more respectively, and to make them contain 0.03 in all to 0.3% of the weight.

[0012] The flavor component used for the seasoning for stir-fried dishes of this invention can give chemical condiment, such as basic seasonings, such as bean paste, soy sauce, a salt, pepper, vinegar, alcohol, sugar, oyster sauce, red, spinach Chinese miso, catsup, a tomato paste, Worcestershire sauce, and nuoc mam, and monosodium glutamate, various extracts, spices, perfume, and other flavors, and such combination is [that what is necessary is just what is used for seasoning of the usual stir-fried dishes / what kind of] sufficient as it.

[0013] Moreover, if edible oil and fat is edible oil and fat used for the usual stir-fried dishes, it cannot interfere, and it can raise modified fat, such as soybean oil, oleum rapae, corn oil, cotton seed oil, sesame oil, olive oil, safflower oil, high OREIKKU safflower oil, sunflower oil, palm oil, peanut oil, butter, beef tallow, lard, chicken oil and these judgment fats and oils, hydrogenated fats and oils, and ester interchange fats and oils, margarine, shortening, etc. as an example. These fats and oils are independent, or they can

be used as mixture of two or more sorts of arbitration rates. In addition, in this invention, liquefied vegetable fat and oil, such as salad oil and sesame oil, can be used as main fats and oils, and animal fat and oil, such as various flavor oils, and butter, lard, can be suitably blended with this if needed.

[0014] In the fats-and-oils whole quantity, the loadings of edible oil and fat are 10 - 50 % of the weight to the whole seasoning of this invention, and are 20 - 40 % of the weight more preferably. It becomes diluted while a result of cooking will become scarce at a feeling of oiliness suitable to a stir-fried-dishes dish, if fewer than 10 % of the weight. Conversely, a result of cooking becomes oily too much and is not desirable if [than 50 % of the weight] more.

[0015] Moreover, it makes it indispensable to blend with the seasoning of this invention one sort chosen from a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin, or two sorts or more. Edible [usual] is presented with each of these. the lecithin manufactured considering oil seeds and the yolks, such as an soybean and a rapeseed, as a raw material with zymolysis lecithin here -- phospholipase A1 Phospholipase A2 etc. -- the mono-acyl glycerol lysolecithin obtained by hydrolyzing with an enzyme is said. HLB is a glycerine fatty acid ester, an organic-acid monoglyceride is seven or more respectively, and a sorbitan fatty acid ester is [five or more / at 14 or more and an organic-acid monoglyceride / in 9 or more and a sorbitan fatty acid ester] 12 or more in a glycerine fatty acid ester more preferably in 7 or more and zymolysis lecithin. Although especially the upper limit of HLB is not specified, it is the 20th place about. An addition is 0.03 - 0.3 % of the weight to the whole seasoning of this invention, and is 0.05 - 0.25 % of the weight more preferably. if there are few additions than 0.03 % of the weight -- the mean particle diameter of the oil droplet particle in an emulsification constituent -- being large (excess of 30 micrometer) -- an emulsification system becomes instability. If [than 0.3 % of the weight] more, while a burn of the food raw material to a frying pan or a pan, a seasoning, etc. will increase, the inclination used as the stir-fried-dishes dish which is not desirable in flavor becomes large. It needs more additions than 0.3 % of the weight and is not desirable if HLB is smaller than 7.

[0016] In addition, the thing with which one sort of a glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin or two sorts or more, and edible [usual] are presented and which HLB made contain one sort of the sucrose fatty acid ester of 11-19 or polyglyceryl fatty acid ester or two sorts 0.03 in all to 0.3% of the weight respectively at this invention is more desirable. Moreover, one sort of one sort or two sorts or more and sucrose fatty acid ester which are chosen from said glycerine fatty acid ester, an organic-acid monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin, or polyglyceryl fatty acid ester, or two sorts of concomitant use rates are still more desirable if one sort of a glycerine fatty acid ester, an organic-acid

monoglyceride, a sorbitan fatty acid ester, or zymolysis lecithin or two sorts or more are 30 % of the weight or more to these both total quantity. As said surfactant, as a glycerine fatty acid ester, for example Glycerol monostearate, As an organic-acid monoglyceride, glycerol distearate, glycerol monooleate, glycerol dioleate, a glycerol MONORINO rate, etc. A citric-acid monoglyceride, a diacetyl tartaric-acid monoglyceride, a succinic-acid monoglyceride, Although sorbitan monostearate, sorbitan monooleate, sorbitan distearate, sorbitan sesquioleate, etc. are raised as sorbitan fatty acid esters, such as an acetic-acid monoglyceride and a lactic-acid monoglyceride, it is not limited to these.

[0017] In short, the seasoning for stir-fried dishes of this invention contains a flavor component, water, and 10 - 50% of the weight of fats and oils for the above. HLB respectively Seven or more glycerine fatty acid esters, an organic-acid monoglyceride, 0.03 - 0.3 % of the weight is used for one sort as which zymolysis lecithin or HLB is chosen from five or more sorbitan fatty acid esters, or two sorts or more. An O/W mold emulsification constituent and nothing, Stir-fried-dishes cooking only by one process heated and mixed with a wok or a frying pan with a food raw material is attained by using this.

[0018] Furthermore, as an O/W mold emulsification constituent, the mean particle diameter of an oil droplet is 30 micrometers or less, and the seasoning for stir-fried dishes of this invention is 20 micrometers or less more preferably. In an excess of 30 micrometer, jump splashes of fats and oils and moisture increase in the case of cooking, and it is not desirable.

[0019] Moreover, the viscosity of the seasoning of this invention is 1000 to 7000 centipoise in 20 degrees C, is 2000 to 6000 centipoise more preferably, and is 3000 to 6000 centipoise still more preferably. By less than 1000 centipoises, jump splashes of fats and oils and moisture increase in the case of cooking, and user-friendliness becomes [a fluidity] few bad as a seasoning by excess of 7000 centipoises. Although viscosity is the O/W mold emulsification constituent of the range of 1000 to 7000 centipoise therefore, it becomes possible to wrap a food raw material in this emulsification coat good, and exudation of the moisture from a food raw material can be controlled, and a result of cooking does not become diluted.

[0020] In addition, in order to set the viscosity of an emulsification constituent as said within the limits, one sort chosen from the group which consists of a carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellant gum, and starch (corn starch, potatostarch, modified starch, etc.), or two sorts or more can be made to contain in this invention. Xanthan gum, tamarind seed gum, or locust bean gum is desirable among these gums or the thickening matter, and the concomitant use with xanthan gum and pectin or concomitant use with xanthan gum and starch is especially effective. Moreover, although it suits with other combination components, it comes out and the

addition of these gums or the thickening matter cannot generally specify ***** easily, it is good at 0 - 10 % of the weight in general.

[0021] In order to manufacture the seasoning of this invention, emulsification can use a well-known approach. namely, an aqueous component -- mixing -- or -- dissolving -- the aqueous phase -- carrying out -- moreover, an oily component -- mixing -- or -- dissolving -- an oil phase, nothing, a blender, a homogenizer, a homomixer, etc. -- using -- the need -- responding -- warming -- what is necessary is to mix the aqueous phase and an oil phase downward, and just to make an O/W mold emulsify In order to obtain the specific thing of the above [viscosity and average oil droplet particle diameter] especially, a homomixer is used for the aqueous phase and an oil phase, and it is 2000rpm. It is good to process more than the above and for 10 minutes, and to emulsify.

[0022] Moreover, in cooking stir-fried dishes, the operation of the seasoning of this invention is good only at the actuation mixed while paying the seasoning of this invention with this raw material in advance of the food raw material cut suitably and heating it like the time of the conventional stir-fried-dishes cooking to cookware, such as a wok and a frying pan.

[Translation done.]

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SEASONING FOR FRIED FOOD
[IRIMONO YOU CHOUMIRYOU]

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[Scope of the Claims]

[Claim 1] Seasoning for fried food that is characterized by having an O/W type emulsion composite that contains a flavoring component, comprised of the aforementioned emulsion composite containing 10 ~ 50 weight% of edible oil, containing 0.03 ~ 0.3 weight% of 1 type or 2 types or more with an HLB of 7 or more, respectively, selected from glycerin fatty acid esters, organic acid monoglycerides, zymolysis lecithins or with an HLB of 5 or more selected from sorbitan fatty acid esters, with a viscosity of 1000 ~ 7000 centipoises/20°C, and an average oil drop particle diameter of 30 [μ]m or less.

[Claim 2] Seasoning for fried food as claimed in Claim 1 wherein 1 type or 2 types or more with an HLB of, respectively, 7 or more selected from glycerin fatty acid esters, organic acid monoglycerides, zymolysis lecithins or with an HLB of 5 or more selected from sorbitan fatty acid esters are jointly used with a 1 or 2 types or more of a polyglycerin fatty acid ester or a saccharide fatty ester with an HLB of 11 ~ 19, respectively, and contains a total of 0.03 ~ 0.3 weight%.

[Claim 3] Seasoning for fried food as claimed in Claim 1 or 2 that contains 1 type or 2 types or more that are

selected from a group that is comprised of carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellan gum and starch.

[Claim 4] Seasoning for fried food as claimed in Claim 1 or 2 that contains xanthan gum and pectin or starch.

[Detailed Explanation of the Invention]

[0001]

[Technological Field of the Invention] The present invention pertains to a seasoning that is suitable for fry cooking. More particularly, can shorten a fry cooking process, improves the production properties when cooking, and imparts a desirable fry cooking product.

[0002]

[Prior Art] Fried food is one [type] of cooking recipe that is widely desired and eaten around the world, and is cooked on very frequent occasions. By fry cooking in a general kitchen, woks and frying pans or such are sufficiently heated on a gas range or the like, and the wok or frying pan or such are sufficiently coated with edible oil (below, simply called oil), and various food raw materials are desirably fried with a strong flame, and desirable flavorings are desired to be added as respective types of seasonings, but is complicated by a certain degree

of technical cooking skill being required due to not having set standards for actual cooking operations. Further, there are problems like oil and moisture spattering during the cooking operations, and raw materials and seasoning burning, and problems occur to varying degrees like the raw material itself being parched due to moisture exuding content from the raw material, while, on the other hand, often being soggy when finished cooling.

[0003] Further, seasonings for frying that have previously been commercially available are 1 type or more of seasonings that are used in addition to flavorings for fried foods simply mixed with water (below, called water type seasoning), and woks and frying pans and such are sufficiently heated by gas ranges and the like, the wok or frying pan or such are sufficiently coated with oil, the food raw material is desirably fried with a strong flame, the seasoning is used by applying the aforementioned seasoning for fried food during frying or immediately before finishing, and the desired simple flavoring is an objective. However, a process with a seasoning for fried food with this type of seasoning for fried food is not said to be sufficiently simplified, and produces problems like the oil and moisture spattering and the food raw materials and seasoning burning even though this kind of seasoning

for fried food is used, and has the problems of the raw material itself being parched due to the moisture exuding from the raw materials, while, on the other hand, often being soggy when finished cooking.

[0004] Any of the prior fried food seasonings like this had a process that had the 2 processes of a process of frying food raw material using oil and a process of carrying out seasoning with seasonings, and further had the problems like oil and moisture spattering, and the food raw material and seasonings burning, and the problems of the raw material itself being parched due to the moisture exuding from the raw materials, while, on the other hand, often being soggy when finished cooking.

[0005]

[Problems to be Solved by the Invention] From the current viewpoint, the present invention is designed by developing a seasoning for fried food that can solve the aforementioned problems of being able to further simplify the process of fried food cooking, the production properties of fried food cooking and the quality of fried food cooking. The objective of the present invention is the offering of a seasoning for fried food that can improve fried food cooking with a process that is simplified by only being mixed while heating by putting in a wok or a

frying pan or such along with the food raw materials and can decrease the spattering of the oil and moisture during the said cooking, can decrease the burning of the food raw material and seasoning, can decrease the exuding of moisture from the raw material, and can control the fried food cooking being soggy by adequate moisture being retained in the raw material.

[0006]

[Means for Solving the Problems] For solving the abovementioned problems, the present inventors investigated the formation of a seasoning for fried food and the compounding components which obtained adequate functions for the possibility of completing fried food cooking with 1 process of only mixing while heating by putting in a wok or frying pan or such along with the food raw material which can simplify the fried food cooking process, and, further, (1) controlling the spattering of oil and moisture when heating, (2) controlling the burning of the cooking raw materials and seasonings and the like to the wok or frying pan or such, and (3) controlling the raw material being parched and soggy when finished cooking.

[0007] The result was the obtainment of knowledge about a seasoning for fried food that is comprised of an O/W type emulsion composite that contains the same

flavoring component, which is more desirable than a prior water-type seasoning for fried food that contains the flavoring component. Further, efficiency was developed for attaining a set condition by containing an oil in an O/W type emulsion composite that contained a flavoring component, and using 1 type or 2 or more types of glycerin fatty acid esters, organic monoglycerides, sorbitan

/3

fatty acid esters or zymolysis lecithins, or specific weight compounding by jointly using 1 type or 2 types of polyglycerin fatty acid esters or saccharide fatty acid esters in these.

[0008] The present invention is completed based on that knowledge, and is a seasoning for fried food that is characterized by being comprised of the aforementioned emulsion composite wherein an O/W type emulsion composite contains a flavoring component, essentially, (likewise below) the edible oil has a content of 10 ~ 50 weight% to the said composite entirety, and is contained at a total of 0.03 ~ 0.3 weight% of 1 type or 2 types or more with an HLB of 7 or more, respectively, that are selected from glycerin fatty acid esters, organic acid monoglycerides, zymolysis lecithins, or with an HLB of 5 or more of sorbitan fatty acid esters, with a viscosity of 1000 ~ 7000

centipoises/20°C, and has an average oil droplet particle diameter of 30 μm or less. Further, the present invention jointly uses 1 type or 2 types or more that are selected from the aforementioned glycerin fatty acid esters, organic monoglycerides, sorbitan fatty acid esters or zymolysis lecithins, and with an HLB of 11 ~ 19 of 1 type or 2 types or more of respectively, saccharide fatty acid esters or polyglycerin fatty acid esters, and is further desired to contain a total of 0.03 ~ 0.3 weight%.

[0009] Further, more desirably, contain 1 type or 2 types or more that are selected from a group carrageenan, xanthan gum, locust bean gum, pectin, tamarind seed gum, guar gum, tragacanth gum, carob bean gum, gellan gum and starch in the aforementioned seasoning for fried food. More desirably, the aforementioned seasoning for fried food contains xanthan gum and pectin or starch.

[0010] Also, the fried food for the present invention can be Chinese cooking, like [untranslatable: chinjya] sliced meat, [untranslatable: hoikourou], [untranslatable: yahosai] or fried rice, general meat types, vegetables, and fish, shellfish, roasts and others.

[0011]

[Embodiments] Below, the present invention is explained in detail. A seasoning for fried food of the

present invention is an O/W type emulsion composite that contains a flavoring component, and is comprised of an edible oil of at least 10 ~ 50 weight% and contains 0.03 ~ 0.3 weight% of 1 type or 2 types or more with an HLB of 7, respectively, or more selected from glycerin fatty acid esters, organic acid monoglycerides, or zymolysis lecithins or with an HLB of 5 or more selected from sorbitan fatty acid esters. Further, the present invention is desired to contain a total of 0.03 ~ 0.3 weight% by jointly using 1 type or 2 types or more with an HLB of 11 ~ 19 of the respective saccharide fatty acid esters or polyglycerin fatty acid esters for 1 type or 2 types or more that are selected from the aforementioned glycerin fatty acid esters, organic acid monoglycerides sorbitan fatty acid esters or zymolysis lecithins.

[0012] Commonly used seasoning flavors are desired to be used for flavoring components that are used in a seasoning for fried food of the present invention and can be imparted and obtained by, for example, basic flavorings like bean paste, soy sauce, salt, pepper, vinegar, alcohol, sugar, oyster sauce, Chinese miso, catsup, tomato paste, Worcestershire sauce, fish sauce, and chemical flavorings like sodium glutamate, various extracts, spices fragrances and other flavorings; further, these can be combined.

[0013] Other edible oil types that are commonly used in fried foods, concretely, soybean oil, rapeseed oil, corn oil, cottonseed oil, sesame oil, olive oil, safflower oil, high oleic safflower oil, sunflower oil, palm oil, peanut oil, butter, tallow, lard chicken oil and processed oils like individual oils, hydrogenated oils, trans-esterification oils and the like of these, margarine and shortening can be used for the edible oils. These oils can be used independently or as mixtures in arbitrary ratios of 2 types or more. Further, in the present invention, the main oils are liquid plant oils like salad oil and sesame oil and various types of flavored oils and animal fats like butter and lard can be mixed in this as needed.

[0014] The compounding amount of the edible oils is 10 ~ 50 weight% for a seasoning entirety of the present invention, and, more desirably, is 20 ~ 40 weight%. [Fried food] becomes soggy when finished cooking, along with the oil being diluted when composed for fried food cooking at less than 10 weight%. Conversely, the [fried food] often is undesirable due to excessive oiliness when finished cooking if more than 50 weight%.

[0015] A seasoning of the present invention can be optionally 1 type or 2 types or more mixed that are selected from glycerin fatty acid esters, organic acid

monoglycerides, sorbitan fatty acid esters or zymolysis lecithins. Any of these can be offered as commonly edible. Here, zymolysis lecithins are monoacylglycerol type lecithins that are obtained by hydrolyzing phospholipase A₁ or phospholipase A₂ or the like with oxygen that is constructed with soybean or rapeseed or the like oil type seeds and yolk as the raw material. The HLB is 7 or more, respectively, for glycerin fatty acid esters or organic monoglycerides, and, more desirably than 5 or more of sorbitan fatty acid esters, is 14 or more for glycerin fatty acid esters, 9 or more for organic acid monoglycerides, 7 or more for sorbitan fatty acid esters, or 12 or more for zymolysis lecithins. The HLB maximum is not limited and can be 20 units. The addition amount is 0.03 ~ 0.3 weight% for the seasoning entirety of the present invention, and is more desirably 0.05 ~ 0.25 weight%. Emulsion types become unstable as the average particle diameter of the oil droplet particles becomes large (exceeding 30 [μm]) when the addition amount is less than 0.03 weight%. The trend becomes large with the fried food cooking without desirability for flavorful-ness accompanying the food raw materials and seasoning and the like often burning in the frying pan and pans and the like when more than 0.3 weight%. When the HLB is less than 7,

the addition amount is not desirable because 0.3 weight% more often is required.

[0016] In the present invention, 1 type or 2 types or more of glycerin fatty acid esters, organic acid monoglycerides, sorbitan fatty acid esters or zymolysis lecithins, commonly offered as edible oils, and 1 type or 2 types of with an HLB of, respectively, 11 ~ 19 saccharide fatty acid esters or polyglycerin fatty acid esters are more desirably contained as a total of 0.03 ~ 0.3 weight%. Further, joint use ratios of 1 type or 2 types or more that are selected from the aforementioned glycerin fatty acid esters, organic monoglycerides, sorbitan fatty acid esters or zymolysis lecithins and 1 type or 2 types of saccharide fatty acid esters or polyglycerin fatty acid esters, are desired to have 1 type or 2 types or more of glycerin fatty acid esters, organic acid monoglycerides, sorbitan fatty acid esters or zymolysis lecithins are 30 weight% or more for the total amount of both of these. The aforementioned surfactants, for example, can be glycerin monostearate, glycerin distearate, glycerin monooleate, glycerin dioleate, glycerin monolinoleate and the like as glycerin fatty acid esters, monoglyceride citrate, diacetyl tartrate monoglyceride, monoglyceride succinate, monoglyceride

acetate, monoglyceride lactate and like as organic acid monoglycerides, and sobitan monostearate, sorbitan monooleate, sorbitan distearate and sorbitan sesquioleate and the like as sorbitan fatty acid esters, but are not limited to these.

[0017] As required above, a seasoning for fired food of the present invention is an O/W type emulsion composite that contains a flavoring component and water and an oil of 10 ~ 50 weight%, using 0.03 ~ 0.3 weight% of 1 type or 2 types or more that are selected with an HLB of 7 or more, respectively, of glycerin fatty acid esters, organic acid monoglycerides, or zymolysis lecithins or with an HLB of 5 or more sorbitan fatty acid esters, and fried food seasoning is possible by only 1 process of adding and mixing by wok or frying pan or such along with food raw material.

[0018] Also, seasoning for fried food of the present invention has an oil droplet average particle diameter of 30 [μ]m or less as an O/W type emulsion composite, and is more desirably 20 [μ]m or less. The frequent spattering of oil and moisture is undesirable when the heated seasoning exceeds 30 [μ]m.

[0019] Further, the viscosity of a seasoning of the present invention is 1000 ~ 7000 centipoises at 20 °C, more

desirably is 2000 ~ 6000 centipoises, and is even more desirable as 3000 ~ 6000 centipoises. The oil and moisture frequently spatter when the heating and cooking if that is less than 1000 centipoises, and the ease of use becomes inferior as the flowability decreases when exceeding 7000 centipoises. Due to being an O/W emulsion composite with a viscosity in the range of 1000 ~ 7000 centipoises, food raw materials can be desirably wrapped with an emulsion film, the exuding of moisture from the food raw material can be controlled, and, thus, is not soggy when finished cooking.

[0020] The present invention can contain 1 type or 2 types or more selected from a group that is comprised of carrageenan, xanthan gum, locust bean gum, pectin, tamarind gum, guar gum, tragacanth gum, carob bean gum, gellan gum and starch (corn starch, potato starch, modified starch) for establishing the viscosity of an emulsion composite within the aforementioned range. The addition amounts of these gum types or thickening substances is desired to be 0 ~ 10 weight% for realizing the general range of other compounding components.

[0021] Conventional methods can be used for the emulsion process for constructing a seasoning of the present invention. Further, a blender, homogenizer or homomixer or the like can be used with a water phase by

mixing and dissolving an aqueous component or an oil phase by mixing and dissolving a lipid component, and a water phase and an oil phase can be mixed while heating as necessary, when emulsifying to an O/W type. The water phase and oil phase can be emulsified by processing at 2000 rpm or more for 10 minutes or more using a homomixer in order for a viscosity and average oil droplet particle diameter to obtain the aforementioned characteristics.

[0022] Further, a seasoning application method of the present invention seasoning for fried food has a seasoning of the present invention is put on a suitably cut food raw material or put in a cooking vessel like a wok or a frying pan along with the raw material, and can be utilized by only mixing while heating in the same manner as during prior fried food cooking.

[0023]

[Examples]

Examples 1 ~ 9, Comparative Examples 1 ~ 5

Fried food seasonings of the present invention and seasoning for comparison were prepared under the processing and emulsion conditions that are shown in Table 1, Table 2 and Table 3. Further, emulsion processing of the seasonings was performed using a TK Homomixer (Tokushu Kika Kogyo (Co.) product). Also, the seasoning of Comparative

Example 1 had emulsion processing performed with only mixing the raw material for the preparation by corresponding to water-type fried food seasonings that contains a flavoring component that was discussed as a prior art item.

[0024] The values that were determined for the viscosity and average oil droplet particle diameter of the prepared seasonings were shown in Table 1, Table 2 and Table 3. Also, the value of 5 revolutions was determined under the conditions of Rotor No. 3, 12 rpm using a BM type viscometer for the viscosity, and the oil droplet particle diameter was determined by observation using a microscope.

[0025]

[Table 1]

/5

	1	2	3	4	5
Water	15.65	35.85	25.50	22.55	22.60
Sugar	12.00	15.00	15.00	15.00	15.00
Flavor	18.00	30.00	20.00	18.00	18.00
Enhancer					
Soy Sauce	5.00	5.00	5.00	5.00	5.00
Chinese Miso	2.00	2.00	2.00	2.00	2.00
Sesame Oil					
Soybean Salad	2.00	2.00	2.00	2.00	2.00
Oil	-	-	30.00	-	-
Rapeseed					
Salad Oil	45.00	10.00	-	35.00	35.00
Glycerin					
Fatty Acid	0.15	-	-	-	0.05
Ester *1					
Organic Acid					
Monoglyceride	-	0.10	-	-	0.15
*2					
Sorbitan					
Fatty Acid					
Ester *3	-	-	0.10	-	-
Zymolysis					
Lecithin *4					
Polyglycerin	-	-	-	0.25	-
Fatty Acid					
Ester *5	0.05	-	-	-	-
Saccharide					
Fatty Acid					

[0026]

[Table 2]

	Example	Example	Example	Example
	6	7	8	9

C	Water	22.60	20.40	22.60	21.80
O	Sugar	15.00	15.00	15.00	15.00
M	Flavor	18.00	18.00	18.00	18.00
P	Enhancer				
O	Soy Sauce	5.00	5.00	5.00	5.00
U	Chinese Miso	2.00	2.00	2.00	2.00
N	Sesame Oil	2.00	2.00	2.00	2.00
D	Soybean Salad	-	-	-	-
I	Oil				
N	Rapeseed	35.00	35.00	35.00	35.00
G	Salad Oil				
C	Glycerin	-	-	0.20	-
O	Fatty Acid				
M	Ester *1	-	-	-	-
P	Organic Acid				
O	Monoglyceride				
N	*2	-	0.10	-	0.10
E	Sorbitan				
N	Fatty Acid	0.10	-	-	-
T	Ester *3				
	Zymolysis	0.05	-	-	-
<Weight%>	Lecithin *4				
	Polyglycerin				
	Fatty Acid	0.05	-	-	-
	Ester *5				
	Saccharide				

	Total	100.0	100.0	100.0	100.0
Emulsion Conditions	Revolutions (rpm)	10,000	10,000	10,000	10,000
	Stirring Period (Minutes)	30	30	30	30
	Temperature	Normal Temperature	Normal Temperature	Normal Temperature	Normal Temperature
Viscosity (centipoises/20°C)		5,000	6,000	4,000	6,000
Average Droplet Particle Diameter ([mu]m)		17	22	21	14

[0027]

[Table 3]

/7

	Example 1	Example 2	Example 3	Example 4	Example 5
Water	56.00	22.75	10.70	22.68	22.78
Sugar	15.00	15.00	12.00	15.00	15.00
Flavor Enhancer	20.00	18.00	10.00	18.00	18.00
Soy Sauce					
Chinese Miso	5.00	5.00	5.00	5.00	5.00
Sesame Oil	2.00	2.00	2.00	2.00	2.00
Soybean Salad Oil	2.00	2.00	-	2.00	2.00
Rapeseed Salad Oil	-	-	-	-	-
Glycerin Fatty Acid Ester *1	-	35.00	60.00	35.00	35.00
Organic Acid Monoglyceride *2	-	0.10	-	-	0.02
Sorbitan Fatty Acid Ester *3	-	-	-	-	-
Zymolysis					
Lecithin *4					
Polyglycerin Fatty Acid Ester *5	-	-	0.10	0.30	-
Saccharide	-	-	-	-	-
Fatty Acid Ester *6	-	-	-	-	-
Xanthan Gum					

[0028] Note 1) Taiyo Kagaku (Co.) Product Frame
Soft A10 (HLB: 14.5)

Note 2) Taiyo Kagaku (Co.) Product Sun Soft No. 641D
(HLB: 9.0)

Note 3) Kao (Co.) Product Emazol L-10F (HLB: 8.6)

Note 4) Taiyo Kagaku (Co.) Product Sanlecithin A
(HLB: 12.0)

Note 5) Taiyo Kagaku (Co.) Product Sansoft Q14S
(HLB: 11.5)

Note 6) Dai-Ichi Kogyo Seiyaku (Co.) Product DK
Ester F140
(HLB: 13.0)

Note 7) Matsutani Kagaku Kogyo (Co.) Pineapple 1

[0029] Fried food was cooked as follows, using the
seasoning that were obtained in Examples 1 ~ 9 and
Comparative Examples 1 ~ 5, and evaluations of the moisture
exuding from the raw materials, ease of cooking and the
finished [product] were performed while cooking and after
cooking.

(Cooking Methods)

A) When using seasonings of Examples 1 ~ 9 and
Comparative Examples 2 ~ 5:

1) 22.5 g of fried food seasoning was put into a frying pan.

2) 30 g of finely cut pork was put into the frying pan, and fried while applying seasoning, and 70 g of chopped cabbage was put in, while set on a flame, and fried until the flame was set for the cabbage.

B) When using seasoning of Comparative Example 1

1) A frying pan was heated, 7.5 g of soybean salad oil was put in, and coated the frying pan.

2) 30 g of finely cut pork was put into the frying pan, and fried while applying seasoning and 70 g of chopped cabbage was put in, while set on a flame, and fried until just before the flame for the cabbage.

3) 15 g of seasoning was put in, and mixed as coating the pork and cabbage.

[0030] The evaluation of the exuding of moisture from the aforementioned raw materials was performed by the following methods with the weight of the separated water and the steam as a standard for the seasonings of Example 1 and Comparative Example 1. The results are shown in Table 4.

Separated Water: The weight was measured with the liquid part as the separated water by dividing the fried

food into a solid part and a liquid part after cooking, using a filter.

Steam: The weight (total of the above-mentioned solid part and liquid part) of the fried food was measured after cooking, and the difference with the total weight of the raw materials and the total weight of the seasonings before cooking

/8

was taken as the steam. From Table 4, the moisture of raw materials being well preserved within the raw materials could be confirmed when using a fried food seasoning of the present invention.

[0031]

[Table 4]

	Example 1 Seasoning	Comparative Example 1 Seasoning
Separated Water (g)	22.6	41.4
Steam (g)	35.3	39.4

[0032] Further, the evaluation of the ease and completion of cooking was performed by evaluation standards

as follows by 10 people panel for the 4 items of simplification of cooking process, spattering of the oil and moisture during cooking, burning of raw materials and seasonings to the frying pan, and being soggy when finished cooking. The average values of the 10 person open panel are shown in Table 4 as the evaluation results.

Cooking Process Simplification

Unusually simplified	5 points
Somewhat simplified	4 points
Neither	3 points
Not simplified	2 points
Not at all simplified	1 point

Spattering of oil and moisture while cooking

Unusually little	5 points
Somewhat little	4 points
Neither	3 points
Somewhat often	2 points
Unusually often	1 point

Burning of the raw materials and seasoning to the pan

Unusually little	5 points
Somewhat little	4 points
Neither	3 points

Somewhat often 2 points
 Unusually often 1 point

Soggy when finished cooking

Unusually little 5 points
 Somewhat little 4 points
 Neither 3 points
 Somewhat often 2 points
 Unusually often 1 point

From Table 5, when using a fried food seasoning of the present invention, cooking of fried food is performed by an extremely simplified cooking process, little spattering of oil and moisture during cooking, little burning of the raw materials and seasonings to the frying pan, and the finished fried food not being soggy were confirmed. Also, there was excessive oiliness when the seasoning of Comparative Example 3 was used, which is undesirable.

[0033]

[Table 5]

/9

Seasoning Types	Simplification of Cooking	Spattering of Oil and	Burning of Raw	Soggy when
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	Process	Water During Cooking	Materials and Seasonings to the Frying Pan	Finished Cooking
Example 1	5.0	4.5	4.8	4.9
Example 2	5.0	4.3	4.9	4.8
Example 3	5.0	4.7	4.8	4.8
Example 4	5.0	4.3	4.8	4.8
Example 5	5.0	4.5	4.8	4.8
Example 6	5.0	4.6	4.8	4.9
Example 7	5.0	4.6	4.7	4.8
Example 8	5.0	4.5	4.8	4.8
Example 9	5.0	4.7	4.8	4.9
Comparative Example 1	3.5	1.5	2.1	1.2
Comparative Example 2	4.5	2.0	4.0	4.0
Comparative Example 3	4.0	3.2	4.5	4.9
Comparative Example 4	3.5	2.0	3.1	3.1
Comparative	3.5	3.0	2.0	3.5

Example 5.				
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[0034]

[Effects of the Invention] The fried food cooking process can be extremely simplified when using a seasoning for fried food of the present invention. That is, fried food can be cooked in 1 process of only mixing while heating by being put in a wok or a frying pan or such along with the food raw materials. Also, there is little spattering of oil and moisture when heating and cooking, little burning of cooking raw materials and seasonings and the like to the wok or frying pan or such, and adequate moisture is retained in the raw materials with little moisture exuded from the raw materials, with little wateriness of the finished fried cooking.